Trial tutorial of Stray Snail

1.Burn the code

The trial code is placed in the 2.2 trial tutorial folder.



1.1.Open the code, and use the data cable to connect the main board interface of Stray Snail and USB interface of computer.



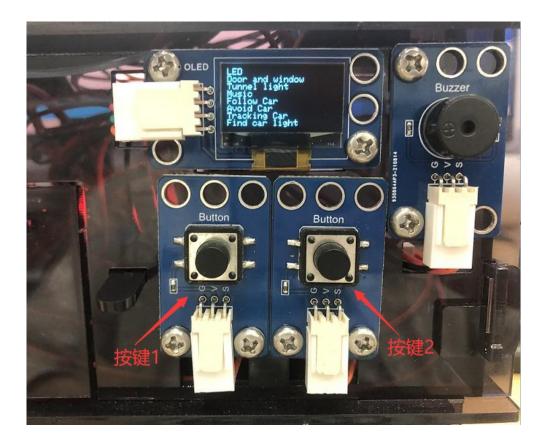
1.2.Burn the trial code

```
0 16_1_Button_switch_multifunction | Arduino 1.8.13
                                                                               文件 编辑 项目 丁具 帮助
   16_1_Button_switch_multifunction

‡define NUMPIXELS 11 //定义灯珠数量

//声明我们的NeoPixel strip对象
Adafruit_NeoPixel pixels(NUMPIXELS, Neo_PIN, NEO_GRB + NEO_KHZ800);
#include<Adafruit_GFX.h>
#include<Adafruit_SSD1306.h>
#define SCREEN_WIDTH 128 // OLED display width, in pixels
#define SCREEN_HEIGHT 64 // OLED display height, in pixels
                     4 // Reset pin # (or -1 if sharing Arduino reset pin)
#define OLED_RESET
#define SCREEN ADDRESS 0x3C ///< See datasheet for Address; 0x3D for 128x64, 0x3C for 1
Adafruit SSD1306 display (SCREEN WIDTH, SCREEN HEIGHT, &Wire, OLED RESET):
int tunnel_count;
#include<OneButton.h>
// Setup a new OneButton on pin 2
```

2.Trial steps



Attention: When enable Follow car, Avoid car, Find car light functions, Stray Snail will move, and be careful not to let it fall off the table.

1.1. Easy trial steps

- The OLED screen shows the names of 8 functions.
- Click button 1 slowly to select the function.
- Double click button 1 quickly to confirm to enter the function, then the screen will display the operation of the function.
- Press and hold button 1 and then press button 2 to exit the current function.
- You can also use Bluetooth APP to connect the Bluetooth module of the little snail to control the driving direction of it.

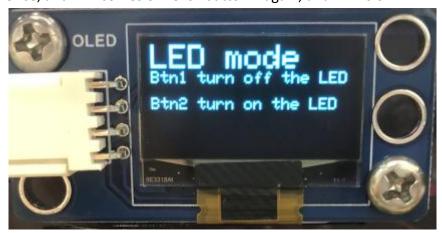
2.2 Detailed trial operation steps

2.2.1. LED

Click button 1 slowly to choose the LED function. The "^"in front of "LED" means that it is selected, as shown below.



Double click button 1 quickly to enter the function of controlling the LED. Click button 1 once, and LED comes on. Click button 1 again, and LED is off.



Press and hold button 1, and click button 2 immediately, the current function will be exited.

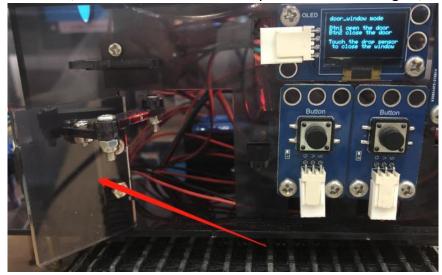
2.2.2. Door and window

Click button 1 slowly to choose Door and window function.



Double click button 1 quickly to enter the function of controlling door and window.

Click button 2 once, and the door and window open. Click button 2 again, they close.



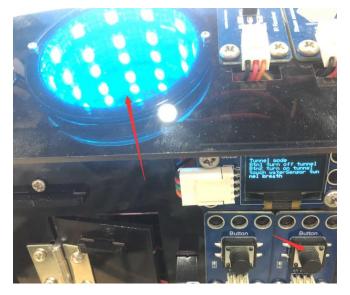
Press and hold button 1, and click button 2 immediately, the current function will be exited.

2.2.3.Tunnel light

Click button 1 slowly to choose Tunnel light function.



Double click button 1 quickly to enter the function of controlling tunnel light. Then click button 2 to change the color of it, as shown below.



Press and hold button 1, and click button 2 immediately, the current function will be

exited.

2.2.4.Music

Click button 1 slowly to choose Music function.



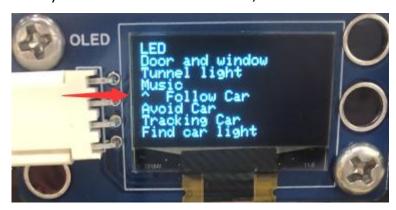
Double click button 1 quickly to enter the function of controlling music. Then click button 2 to make the buzzer to play a song Happy Birthday.

Press and hold button 1, and click button 2 immediately, the current function will be exited.

2.2.5. Follow car

Ultrasonic follow function

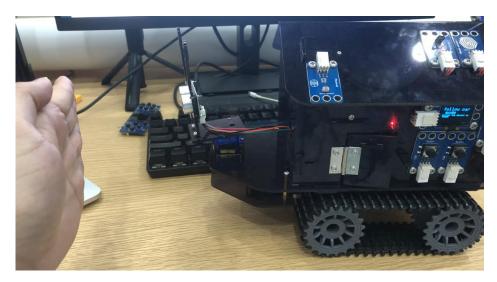
Click button 1 slowly to choose Follow car function, as shown below.



Double click button 1 quickly to enter Follow car function.



Then, put your hand or a flat object in front of the ultrasonic sensor on the head of the little snail, and slowly move back and forth, the snail will move back and forth.



Press and hold button 1, and click button 2 immediately, the current function will be exited.

2.2.6. Avoid Car

Ultrasonic avoidance function

Click button 1 slowly to choose Avoid car function.



Double click button 1 quickly to enter Avoid car function. Once the function is entered, the little snail will move immediately. So, be careful not to let fall off the table.

When the ultrasonic module on the head of Stray Snail judges that the distance between the obstacles in front is close, it will stop. Then the steering gear rotates and the module judges the distance between the obstacles on the left and right sides. The little snail chooses the side with a relatively long distance to turn and move forward.

Press and hold button 1, and click button 2 immediately, the current function will be exited.

2.2.7.Tracking Car

Tracking function

Click button 1 slowly to choose Tracking car function.



Double click button 1 quickly to enter Tracking car function.

Take out the tracking drawing provided by us and put Stray Snail on the tracking drawing. When the tracking sensor is aligned with the black track, the little snail will follow the black line. See the figure below.



Press and hold button 1, and click button 2 immediately, the current function will be exited.

2.2.8. Find car light

Light control little snail

Note: It needs to be in a dark environment, otherwise the ambient light intensity is greater than the set value, and the little snail will move directly without using a flashlight.

Click button 1 slowly to choose Find car light function, and then double click button 1 quickly to enter it.



Normally, the little snail will not move, and then turn on the flashlight of the mobile phone to irradiate the photosensitive sensors on both sides of the roof. The little snail moves forward. Irradiate the photosensitive sensor on the left and the little snail turns left. Irradiate the photosensitive sensor on the right, and the little snail turns right.



Press and hold button 1, and click button 2 immediately, the current function will be exited.